

Title (en)  
Tig welding method

Title (de)  
WIG Schweissverfahren

Title (fr)  
Procédé de soudageTIG

Publication  
**EP 1459830 B2 20110420 (EN)**

Application  
**EP 04380061 A 20040322**

Priority  
JP 2003076318 A 20030319

Abstract (en)  
[origin: EP1459830A1] A TIG welding equipment and a TIG welding method are described, capable of forming a welded metal portion deeply without lowering the welding quality, making the welding performance easier and improving the welding efficiency. The TIG welding equipment includes an electrode (2) for generating an electric arc (7) between itself and the welded object (10), a tubular inner nozzle (3) disposed surrounding the electrode (2), and a tubular outer nozzle (4) disposed surrounding the inner nozzle (3). A first shielding gas (8) composed of an inert gas can be supplied from the inner nozzle (3), and a second shielding gas (9) containing an oxidative gas can be supplied from between the inner nozzle (3) and the outer nozzle (4). <IMAGE>

IPC 8 full level  
**B23K 9/167** (2006.01); **B23K 9/29** (2006.01); **B23K 35/38** (2006.01); **C23C 8/10** (2006.01); **C23C 26/02** (2006.01)

CPC (source: EP US)  
**B23K 9/167** (2013.01 - EP US); **B23K 9/296** (2013.01 - EP US); **B23K 35/383** (2013.01 - EP US); **C23C 8/10** (2013.01 - EP US); **C23C 26/02** (2013.01 - EP US)

Citation (opposition)  
Opponent :

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**EP 1459830 A1 20040922; EP 1459830 B1 20080319; EP 1459830 B2 20110420**; CA 2461317 A1 20040919; DE 602004012468 D1 20080430; DE 602004012468 T2 20090305; DE 602004012468 T3 20111229; TW 200510105 A 20050316; US 2004188390 A1 20040930

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**EP 04380061 A 20040322**; CA 2461317 A 20040318; DE 602004012468 T 20040322; TW 93104039 A 20040219; US 80482304 A 20040319